

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
1 April 2004 (01.04.2004)

PCT

(10) International Publication Number
WO 2004/026903 A2

- (51) International Patent Classification⁷: **C07K 14/45** (74) Agents: MESTROM, J., J., L. et al.; Intervet International B.V., P.O. Box 31, NL-5830 AA Boxmeer (NL).
- (21) International Application Number: PCT/EP2003/010696 (81) Designated States (*national*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (22) International Filing Date: 19 September 2003 (19.09.2003)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data: 02078953.3 20 September 2002 (20.09.2002) EP (84) Designated States (*regional*): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).
- (71) Applicant (*for all designated States except US*): **AKZO NOBEL N.V.** [NL/NL]; Velperweg 76, NL-6824 BM Arnhem (NL).
- (72) Inventors; and
- (75) Inventors/Applicants (*for US only*): **VAN POPPEL, Nicole, Francisca, Johanna** [NL/NL]; Van Welderenstraat 105 A, NL-6511 MG Nijmegen (NL). **VERMEULEN, Arnoldus, Nicolaas** [NL/NL]; Korhoenderveld 34, NL-5431 HH Cuyk (NL). **SCHAAP, Theodorus, Cornelis** [NL/NL]; Van de Does de Willeboissingel 53, NL-5211 CE's-Hertogenbosch (NL).
- Published:
— *without international search report and to be republished upon receipt of that report*
- For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.*



WO 2004/026903 A2

(54) Title: LIVE ATTENUATED PARASITE VACCINE

(57) Abstract: The present invention relates *inter alia* to attenuated live parasites of the phylum Apicomplexa and the family of Trypanosomatidae and to the use of such attenuated live parasites in a vaccine and in the manufacturing of such a vaccine. Furthermore, the present invention relates to vaccines comprising such attenuated live parasites and to methods for the production of such vaccines. Finally, the invention relates to specific tet-repressor fusion proteins and to attenuated live parasites according to the invention comprising such tet-repressor fusion proteins.